

Diagenetic dolomite reservoirs in carboniferous rocks of Melekess depression and South-Tatar arch

Korolev E., Morozov V., Eskin A., Kolchugin A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

It was studied secondary dolomite reservoirs in Carboniferous oil saturated carbonate rocks from the Melekess depression and South-Tatar arch. It was revealed three morphological types of non-anticlinal dolomite traps: lenticular, one-layer, multilayer. It was found that the development of lenticular dolomite traps confined to zones of oilwater contacts, one-layer to flanks of anticlinal uplifts which connected with the migration ways of oil-water fluids (tectonic faults, erosion incisions). It was suggested the mechanism of formation dolomite reservoir due to the oxidation of hydrocarbons and upward migration of carbon dioxide deep fluids.

Keywords

Diagenesis, Dolomite, Hydrocarbons, Oil-water contact, Reservoir